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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|----------------------------|---|----------------------|---------------------|------------------|--|
| 10/772,293 | 02/06/2004 | Hong-Sick Park | 8071-112T | 4918 | |
| 7590 F. Chau & Associat | • | EXAMINER | | | |
| 130 Woodbury Roa | | PHAM, LONG | | | |
| Woodbury, NY 11797 | | | ART UNIT | | |
| | | | 2814 | | |
| | | MAIN DATE | DELIVER | VMODE | |
| SHORTENED STATUTORY PE | RIOD OF RESPONSE | MAIL DATE | DELIVERY MODE | | |
| 3 MONTH | \$ | 01/17/2007 | PAPER | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | | Application No | | Applicant(s) | | | | |
|---|---|---|---|--|--|---------|--|--|--|
| | | 10/772,293 | | PARK ET AL. | · | | | | |
| Office Action Summary | | | Examiner | | Art Unit | | | | |
| | | | Long Pham | | 2814 | | | | |
| Period fo | The MAILING DATE of this commun r Reply | nication appe | ears on the cove | er sheet with the co | orrespondence ad | dress | | | |
| WHIC - Exter after - If NO - Failu Any | ORTENED STATUTORY PERIOD F CHEVER IS LONGER, FROM THE N nsions of time may be available under the provision: SIX (6) MONTHS from the mailing date of this come period for reply is specified above, the maximum some re to reply within the set or extended period for reply reply received by the Office later than three months and patent term adjustment. See 37 CFR 1.704(b). | MAILING DA s of 37 CFR 1.130 munication. tatutory period wi y will, by statute. | TE OF THIS C 6(a). In no event, how Ill apply and will expire cause the application | OMMUNICATION vever, may a reply be time SIX (6) MONTHS from to become ABANDONE | l. ely filed he mailing date of this c O (35 U.S.C. § 133). | | | | |
| Status | | | | | | | | | |
| 1) | Responsive to communication(s) file | ed on | _• | | | | | | |
| 2a)□ | • | | - action is non-fir | nal. | | | | | |
| 3) | | | | | | | | | |
| | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | | | |
| Dispositi | on of Claims | | | | | | | | |
| 4)⊠ |)⊠ Claim(s) <u>1-25</u> is/are pending in the application. | | | | | | | | |
| | 4a) Of the above claim(s) <u>18-25</u> is/are withdrawn from consideration. | | | | | | | | |
| 5)🖂 | ☑ Claim(s) <u>15-17</u> is/are allowed. | | | | | | | | |
| 6)⊠ | Claim(s) 1 is/are rejected. | | | | | | | | |
| • | Claim(s) <u>2-14</u> is/are objected to. | | | | | | | | |
| 8)□ | Claim(s) are subject to restri | ction and/or | election require | ement. | | | | | |
| Applicati | on Papers | | | | | | | | |
| 9) | The specification is objected to by the | ne Examiner | • | | | | | | |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | | | | | |
| | Applicant may not request that any object | ection to the d | lrawing(s) be hel | d in abeyance. See | 37 CFR 1.85(a). | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | | | | |
| 11) | The oath or declaration is objected t | o by the Exa | aminer. Note th | e attached Office | Action or form P1 | TO-152. | | | |
| Priority ι | ınder 35 U.S.C. § 119 | | | • | | | | | |
| | Acknowledgment is made of a claim ☑ All b) ☐ Some * c) ☐ None of: | | | | -(d) or (f). | | | | |
| | 1. Certified copies of the priority documents have been received. | | | | | | | | |
| | 2. Certified copies of the priority documents have been received in Application No | | | | | | | | |
| | 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). | | | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | | | |
| | | | | | | | | | |
| A 44 | 44-3 | | | • | | | | | |
| Attachmen 1) Notice | t(s) e of References Cited (PTO-892) | | ٨٢ | Interview Summon | (PTO-413) | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) | | | 4) Interview Summary (PTO-413) Paper No(s)/Mail Date. | | | | | | |
| 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 5) Notice of Informal Patent Application 6) Other: | | | | | | | | | |
| Paper No(s)/Mail Date 6) U Other: | | | | | | | | | |

Art Unit: 2814

DETAILED ACTION

IDS

The applicant is requested to submit the prior art as disclosed in paragraph [0006] of this application.

Election/Restrictions

Applicant's election with traverse of claims 1-17 in the reply filed on 10/27/06 is acknowledged. The traversal is on the ground(s) that see election of 10/27/06. This is not found persuasive because the searches for the device and process inventions are not co-extensive so separate searches have to be made.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112: The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 recites the limitation "the drain electrode" in line 7. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Application/Control Number: 10/772,293

Art Unit: 2814

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over the applicant's admitted prior art (AAPA) of this application.

With respect to claim 1, AAPA teaches a method of manufacturing a thin film transistor array panel, the method comprising (see pages 1 and 2 of this application):

Forming a gate conductor on an insulating substrate;

Forming a gate insulating layer;

Forming a semiconducto member;

Forming a data conductor; and

Forming a pixel electrode connected to a drain electrode.

AAPA appears to teach forming the gate conductor, the data conductor, and the pixel electrode are formed by etching using different etchants and conditions.

However, it would have been obvious to one of skilled in semiconductor art to form the gate conductor, the data conductor, and the pixel electrode by etching using single etchant or one etchant to reduce processing steps and processing material to thereby reduce production cost.

Allowable Subject Matter

Claims 2-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 15-17 are allowed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Long Pham whose telephone number is 571-272-1714. The examiner can normally be reached on Mon-Frid, 10am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on 571-272-1705. The fax

Application/Control Number: 10/772,293 Page 4

Art Unit: 2814

phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

K∕øng 4Pham

Primary Examiner

Art Unit 2814